



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D350-591-312
Job Sheet 180441



Part No: D350-591-312

Job Qty: 2 ea

Part Name: Heli-Access-Step™ RH - High Gear, Long Step, Aerazur Float Compatible



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 7/6/18

Job Tracking No: NON-AIRBUS

Created By: Linda Lacelle

Due Date: 7/26/18

Type: SOLD

Description:

Note: DWG REV B IPP Rev:A 04.03.22 New issue KJ/RF IPP Rev:B 07-06-09 Added D3572-1 JLM IPP Rev:C 08-04-02 ECN1163 DD verified by:EC IPP Rev:D 08-04-08 ECN1164 DD verified by:eC IPP Rev:D fixe route seq in bom DD 10.04.28 verified by:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	2 Ea	7/26/18	7/26/18	0.00	0.00	Start Up Large Fab-4		SLY
110	Large Fab	2 pcs	7/26/18	7/26/18	0.00	2.00	Large Fab 2		CPC
120	QC	2 pcs	7/26/18	7/26/18	0.00	0.00	QC9		SA 18-07-24
130	QC	2 pcs	7/26/18	7/26/18	0.00	0.00	QC5		CPL
140	HandFinish	2 pcs	7/26/18	7/26/18	0.00	0.37	HandFinish1		CPL
150	QC	2 pcs	7/26/18	7/26/18	0.00	0.00	QC7-2		SA 18-07-30
180	Large Fab	2 pcs	7/26/18	7/26/18	0.00	2.00	Large Fab 2		SA 18-07-30
190	QC	2 pcs	7/26/18	7/26/18	0.00	0.00	QC10		SA 18-07-30
200	QC	2 pcs	7/26/18	7/26/18	0.00	0.00	QC5		SA 18-07-30
210	HandFinish	2 pcs	7/26/18	7/26/18	0.00	0.37	HandFinish1		SA 18-07-30
220	Powdercoat	2 pcs	7/26/18	7/26/18	0.00	0.60	Powdercoat1		SA 18-07-30
230	HandFinish	2 pcs	7/26/18	7/26/18	0.00	0.37	HandFinish3		SA 18-07-30
240	QC	2 pcs	7/26/18	7/26/18	0.00	0.00	QC3		SA 18-07-30
250	Packaging	2 pcs	7/26/18	7/26/18	0.00	0.00	Packaging1-3		SA 18-07-30
260	QC	2 pcs	7/26/18	7/26/18	0.00	0.00	QC4		SA 18-07-30
270	Packaging	2 pcs	7/26/18	7/26/18	0.00	0.00	Packaging3-1		SA 18-07-30
275	DC	2 pcs	7/26/18	7/26/18	0.00	0.00	DC		SA 18-07-30
280	QC21-FG	2 Ea	7/26/18	7/26/18	0.00	0.00	QC21		SA 18-07-30

Part Op 110 - 1-Bevel end for welding FWD ONLY 2-Weld Support using Jig DT10115, weld Fwd End Plate as per QSI 004 & Dwg Descriptions: D3272 A/R Aluminum Rod M1385 3-Grind End Plate flush

180 - 1-Assemble Leg Assembly as per Dwg D3272. 2-Leave one rivet out until welding is complete. 3-Bevel Aft end for welding 4-Inspect for foreign object as per QSI 024 5-Weld Aft End Plate as per QSI 004 & Dwg D3272 A/R Aluminum Rod M1385 6-Grind End Plate flush 7-Install last rivet as per Dwg.

220 - START TIME: 10:30 AM OVEN TEMPERATURE: 320°F FINISH TIME: 11:00 AM

270 - Identify and pack for shipping as per PPPD350-591-312 Location :FG072

275 - Photocopy bluefile and type labels as per PPP D350-591-312 CHG001



Container No: S091925



Part: D350-591-312

Job No: 180441

Serial No/Batch: S091925

Revision:
Inspector:

Dart Aerospace Ltd.
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wing walk 508095
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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval			
Description Work Order Deviation				Disposition				Completed By			
								Lead hand / Supervisor Approval Verification			
								QC / QA Coordinator Approval			
FAULT CATEGORY											
		Wave Tric		☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes				☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center		☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence	
LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Wave/Twist in Tube Marks/Chatter OTHER : _____							

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D3067-1	End Plate	4 Ea (2 ea)	90-Start up Operation	5069554
D3219-1	Plate	4 Ea (2 ea)	90-Start up Operation	5083126
D3272-1	Step	2 Ea (1 ea)	90-Start up Operation	5091015 / 5091618
D3065-041	Step Leg Assembly	2 Ea (1 ea)	180-Large Fab	5081932
D3066-1	Spacer	4 Ea (2 ea)	180-Large Fab	5088668
MS20600-AD4W4	Rivet	32 Ea (16 ea)	180-Large Fab	5079116
AN3-35A	Bolt	4 Ea (2 ea)	250-Packaging	
AN4-13A	Bolt	16 Ea (8 ea)	250-Packaging	
AN5-36A	Bolt	4 Ea (2 ea)	250-Packaging	
D2230-3	Mounting Lug	8 Ea (4 ea)	250-Packaging	
D2618	Bushing	4 Ea (2 ea)	250-Packaging	
D2856-400-720	Abrasion Strip 4" X 7.20"	4 Ea (2 ea)	250-Packaging	
D3235-1	Mounting Lug	4 Ea (2 ea)	250-Packaging	
D3278-041	Support Assembly	2 Ea (1 ea)	250-Packaging	
MS21042L3	Nut	4 Ea (2 ea)	250-Packaging	
MS21042L4	Nut	16 Ea (8 ea)	250-Packaging	
MS21042L5	Nut	4 Ea (2 ea)	250-Packaging	
NAS1149D0363J	Washer	8 Ea (4 ea)	250-Packaging	
NAS1149D0463J	Washer	32 Ea (16 ea)	250-Packaging	
NAS1149D0563J	Washer	8 Ea (4 ea)	250-Packaging	
DSI 9410-011	Amends Installation Of D350-591-311/-312 Steps	2 Ea (1 ea)	250-Packaging	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	D3067-1	4	133	0
	D3219-1	4	123	0
	D3272-1	2	25	0
180-Large Fab	D3065-041	2	18	0
	D3066-1	4	178	0
	MS20600-AD4W4	32	3,204	0
250-Packaging	AN3-35A	4	380	0
	AN4-13A	16	2,267	0
	AN5-36A	4	324	0
	D2230-3	8	333	0
	D2618	4	220	0
	D2856-400-720	4	74	0
	D3235-1	4	117	0
	D3278-041	2	42	0
	DSI 9410-011	2	14	0
	MS21042L3	4	2,128	0
	MS21042L4	16	3,306	0
	MS21042L5	4	922	0
	NAS1149D0363J	8	1,662	0
	NAS1149D0463J	32	7,409	0
	NAS1149D0563J	8	1,662	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								



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Canada

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D350-591-312
Job Sheet 180441



Part No: D350-591-312

Job Qty: 2 ea

Part Name: Heli-Access-Step™ RH - High Gear, Long Step, Aerazur Float Compatible



Part Weight: 0 lbs.

Status: Scheduled

Priority: Medium

Job Created: 7/6/18

Job Tracking No: NON-AIRBUS

Due Date: 7/26/18

Created By: Linda Lacelle

Type: SOLD

Description:

Note: DWG REV B IPP Rev:A 04.03.22 New issue KJ/RF IPP Rev:B 07-06-09 Added D3572-1 JLM IPP Rev:C 08-04-02 ECN1163 DD verified by:EC IPP Rev:D 08-04-08 ECN1164 DD verified by:eC IPP Rev:D fixe route seq in bom DD 10.04.28 verified by:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	2 Ea		7/26/18	0.00	0.00	Start Up Large Fab-4		
110	Large Fab	2 pcs		7/26/18	0.00	2.00	Large Fab 2		Slg CPC
120	QC	2 pcs		7/26/18	0.00	0.00	QC9		Slg
130	QC	2 pcs		7/26/18	0.00	0.00	QC5		Slg
140	HandFinish	2 pcs		7/26/18	0.00	0.37	HandFinish1		SA 15-07-24
150	QC	2 pcs		7/26/18	0.00	0.00	QC7-2		CPC
180	Large Fab	2 pcs		7/26/18	0.00	2.00	Large Fab 2		CPC
190	QC	2 pcs		7/26/18	0.00	0.00	QC10		Slg
200	QC	2 pcs		7/26/18	0.00	0.00	QC5		Slg
210	HandFinish	2 pcs		7/26/18	0.00	0.37	HandFinish1		SA 15-07-30
220	Powdercoat	2 pcs		7/26/18	0.00	0.60	Powdercoat1		SA 15-07-30
230	HandFinish	2 pcs		7/26/18	0.00	0.37	HandFinish3		BE 15-07-30
240	QC	2 pcs		7/26/18	0.00	0.00	QC3		
250	Packaging	2 pcs		7/26/18	0.00	0.00	Packaging1-3		
260	QC	2 pcs		7/26/18	0.00	0.00	QC4		
270	Packaging	2 pcs		7/26/18	0.00	0.00	Packaging3-1		
275	DC	2 pcs		7/26/18	0.00	0.00	DC		
280	QC21-FG	2 Ea		7/26/18	0.00	0.00	QC21		

Part Op 110 - 1-Bevel end for welding FWD ONLY 2-Weld Support using jig DT10115, weld Fwd End Plate as per QSI 004 & Dwg Descriptions: D3272 A/R Aluminum Rod D 15-35 3-Grind End Plate flush

180 - 1-Assemble Leg Assembly as per Dwg D3272. 2-Leave one rivet out until welding is complete. 3-Bevel Aft end for welding 4-Inspect for foreign object as per QSI 024 5-Weld Aft End Plate as per QSI 004 & Dwg D3272 A/R Aluminum Rod 15-35 6-Grind End Plate flush 7-Install last rivet as per Dwg.

220 - START TIME: 10:30 OVEN TEMPERATURE: 320°F FINISH TIME: 11:20

270 - Identify and pack for shipping as per PPPD350-591-312 Location :FG072

275 - Photocopy bluefile and type labels as per PPP D350-591-312 CHG001

508893



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Container No: S091925



Part: D350-591-312

Job No: 180441

Serial No/Batch: S091925

Revision:

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Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D3067-1	End Plate	4 Ea (2 ea)	90-Start up Operation	5067891
D3219-1	Plate	4 Ea (2 ea)	90-Start up Operation	5089302
D3272-1	Step	2 Ea (1 ea)	90-Start up Operation	5071345
D3065-041	Step Leg Assembly	2 Ea (1 ea)	180-Large Fab	50822425
D3066-1	Spacer	4 Ea (2 ea)	180-Large Fab	5092463
MS20600-AD4W4	Rivet	32 Ea (16 ea)	180-Large Fab	50891015
AN3-35A	Bolt	4 Ea (2 ea)	250-Packaging	5092091
AN4-13A	Bolt	16 Ea (8 ea)	250-Packaging	5089340
AN5-36A	Bolt	4 Ea (2 ea)	250-Packaging	5089365
D2230-3	Mounting Lug	8 Ea (4 ea)	250-Packaging	5058178
D2618	Bushing	4 Ea (2 ea)	250-Packaging	5068661
D2856-400-720	Abrasion Strip 4" X 7.20"	4 Ea (2 ea)	250-Packaging	5089299
D3235-1	Mounting Lug	4 Ea (2 ea)	250-Packaging	5093773
D3278-041	Support Assembly	2 Ea (1 ea)	250-Packaging	5081331
MS21042L3	Nut	4 Ea (2 ea)	250-Packaging	
MS21042L4	Nut	16 Ea (8 ea)	250-Packaging	
MS21042L5	Nut	4 Ea (2 ea)	250-Packaging	
NAS1149D0363J	Washer	8 Ea (4 ea)	250-Packaging	
NAS1149D0463J	Washer	32 Ea (16 ea)	250-Packaging	
NAS1149D0563J	Washer	8 Ea (4 ea)	250-Packaging	
DSI 9410-011	Amends Installation Of D350-591-311/-312 Steps	2 Ea (1 ea)	250-Packaging	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	D3067-1	4	133	0
	D3219-1	4	123	0
	D3272-1	2	25	0
180-Large Fab	D3065-041	2	18	0
	D3066-1	4	178	0
	MS20600-AD4W4	32	3,204	0
250-Packaging	AN3-35A	4	380	0
	AN4-13A	16	2,267	0
	AN5-36A	4	324	0
	D2230-3	8	333	0
	D2618	4	220	0
	D2856-400-720	4	74	0
	D3235-1	4	117	0
	D3278-041	2	42	0
	DSI 9410-011	2	14	0
	MS21042L3	4	2,128	0
	MS21042L4	16	3,306	0
	MS21042L5	4	922	0
	NAS1149D0363J	8	1,662	0
	NAS1149D0463J	32	7,409	0
	NAS1149D0563J	8	1,662	0

Part Specifications

Specifications could not be found.



Dart Aerospace Ltd.
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Container View (Active) - Master Unit Containers

Master Unit No	Container No	Part No	Part Name	From Container	Current Location	Quantity
004790	S098219	AN3-35A	Bolt	S067891	ST348	4
004790	S098222	AN4-13A	Bolt	S089302	OVER003	16
004790	S098226	AN5-36A	Bolt	s071345	ST336	4
004790	S098284	D2618	Bushing	S082275	ST008	4
004790	S098285	D2856-400-720	Abrasion Strip 4" X 7.20"	S092667	ST418	4
004790	S098282	D3235-1	Mounting Lug	S089615	ST522	4
004790	S098278	D3278-041	Support Assembly	S092091	ST522	2
004790	S098267	DSI 9410-011	Amends Installation Of D350-591-311/-312 Steps	S081331	FG123	2
004790	S098254	MS21042L3	Nut	s089340	ST303	4
004790	S098253	MS21042L4	Nut	s089365	ST303	16
004790	S098250	MS21042L5	Nut	s058178	ST303	4
004790	S098247	NAS1149D0363J	Washer	s068661	ST263	8
004790	S098230	NAS1149D0463J	Washer	s089299	ST263	32
004790	S098229	NAS1149D0563J	Washer	s093773	ST263	8

Note: Ad hoc query view of Part.dbo.Container where Container.Active = 1.

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PAGE 1 OF 2

Description: HELI-ACCESS STEP, HIGH SKID, LONG STEP, LH/RH

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Qty -213	Qty -214	Qty -215	Qty -216	Qty -311	Qty -312	Part Number	Description
X						D350-591-213	<i>Heli-Access-Step™</i> , Short Step – High Skid, LH
	X					D350-591-214	<i>Heli-Access-Step™</i> , Short Step – High Skid, RH
		X				D350-591-215	<i>Heli-Access-Step™</i> , Short Step – Low Skid, LH
			X			D350-591-216	<i>Heli-Access-Step™</i> , Short Step – Low Skid, RH
				X		D350-591-311	<i>Heli-Access-Step™</i> , Long Step – High Skid, LH
					X	D350-591-312	<i>Heli-Access-Step™</i> , Long Step – High Skid, RH
1						D3078-041	STEP ASSEMBLY (HIGH-SHORT, LH)
	1					D3078-042	STEP ASSEMBLY (HIGH-SHORT, RH)
		1				D3168-041	STEP ASSEMBLY (LOW-SHORT, LH)
			1			D3168-042	STEP ASSEMBLY (LOW-SHORT, RH)
				1		D3272-041	STEP ASSEMBLY (HIGH-LONG, LH)
					1	D3272-042	STEP ASSEMBLY (HIGH-LONG, RH)
2	2	2	2	4	4	D2230-3	MOUNTING LUG
2	2	2	2	2	2	D2618	BUSHING
4	4	4	4			D2732-030	CUSHION
				2	2	D2856-400-720	ABRASION STRIP
2	2	2	2	2	2	D3235-1	MOUNTING LUG
				1	1	D3278-041	SUPPORT ASSEMBLY
2	2	2	2	2	2	AN3-35A	BOLT
				8	8	AN4-13A	BOLT
4	4	4	4			AN4-15A	BOLT
2	2	2	2	2	2	AN5-36A	BOLT
4	4	4	4	4	4	NAS1149D0363J	WASHER (AN960JD10)
12	12	12	12	16	16	NAS1149D0463J	WASHER (AN960JD416)
4	4	4	4	4	4	NAS1149D0563J	WASHER (AN960JD516)
2	2	2	2	2	2	MS21042L3	NUT
6	6	6	6	8	8	MS21042L4	NUT
2	2	2	2	2	2	MS21042L5	NUT
				1	1	*DSI 9410-011	STEP MODIFICATION KIT

*DSI 9410-011 Step Modification Kits are provided with all D350-591-311 and D350-591-312 Steps. This kit is provided as an option for the installer and is therefore **NOT REQUIRED** to complete the installation of the D350-591-311 or D350-591-312 Steps. Refer to Figure 15 for installation of the DSI 9410-011 Kit.

REFERENCE ONLY

REFERENCE ONLY